in South America, an obscure disease, known as Verruga, has existed for years. Recently, the possibility of the transmission by some species of insect, or tick, has been seriously entertained. and we now learn from "Science" (August 15th, 1913) that Mr. Charles H. T. Townsend, who was some time ago especially charged by the Peruvian Government with the investigation of the insect transmission of verruga, injected a dog with triturated females of Phlebotomus on July 11th, and on July 17th secured as a result an unmistakable case of verruga eruption. The gnats used for the injection were secured on the night of July 9th, in Verrugas Canvon, a noted focus of the disease. This is the first experimental transmission of verruga by means of insects, and adds a notable case to the list of insect-borne diseases. The details of the experiment will appear shortly. Further transmission work in laboratory animals will be pursued at once, both by injections and by causing the gnats to bite. C. G. H.

## A NEW LEPTODESMID FROM MONTANA. BY RALPH V. CHAMBERLIN, CAMBRIDGE, MASS.

The following description is published separately in order that the name may be available for early use.

## Leptodesmus (Chouaphe) elrodi, sp. nov.

Light brown to very deep brown and brownish black, the background sometimes rather obscurely chestnut. Carinal and anal process in darker individuals orange, in paler even more yellowish; the first dorsal plate also paler, yellowish, oblong anterior margin. The metazonites may be be paler caudally.

Head with the median sulcus deep. Vertex moderately finely uneven or coriaceous, bearing several long bristles across vertex and also in clypeal region above those of labial border. Antennæ of moderate length. First or cervical dorsal plate narrower than the second one, anteriorly strongly convex; caudal margin moderately deeply concave mesally; laterally margined. Caudolateral angles with caudal side nearly straight. Dorsum strongly arched; anterolateral corners of plates convexly rounded, in the second to fifth plates a little extended cephalad, but in others more and

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more sloping off caudad. Caudal corners in about the second to the eighth plates bent moderately forward, then becoming straight in a few and then bent caudad, and in the last few forming a distinct but always distally rounded process: edges of

lateral carine narrowly elevated; pores opening ectad; nineteenth plate much shortened, its processes reduced; metazonites with transverse furrow distinct; surface to naked eye appearing nearly smooth and shining, under the lens finely coriaceous, more strongly roughened laterally. Sternites smooth, glabrous. A deep transverse sulcus at middle and a weaker median longitudinal one crossing it at right angles. Anal process in dorsal outline subtriangular, distally subcylindric, the tip a little



Fig. 17.—*Leptodesmus elrodi*, caudoventral view of distal portion of right male gonopod.

depressed; a transverse row of four bristles near middle of length and toward and on tip about eight more. Anal scale semilunar in outline, but with the anterior margin weakly convex, bearing a bristle on each side a little in front of caudal margin. Anal valves elevated along mesal border, each bearing a bristle a little ectad of mesal edge near middle of length and a second one in line with it farther caudad. Legs clothed with stiff hairs, which proximally are sparse, but distally, and especially on dorsal surface, become more dense and at the same time shorter. Male gonopods consisting of two long prongs, of which the posterior one is distally slender and style-like and curves evenly, first dorsal and somewhat mesad and then back proximad. The anterior branch just proximad of the curve in the first one expands into a subtriangular plate on the dorsomesal side, which along its distal or caudal edge bears several short teeth, of which the one at angle is the longest; the prong continues beyond this on a more slender blade which bends abruptly dorsad or dorso-ectad and bears on its proximal edge and mostly on distal portion a series of long, curved, spinelike processes. (See fig. 17).

Locality.-Montana (Flathead Lake).

The specimens forming the types of this species were collected by Dr. C. C. Adams in the summer of 1912. The species is named in honour of Prof. Morton J. Elrod, of the University of Montana, who is doing much in aiding the advancement of our knowledge of the Natural History of Montana.

## A NEW PAMPHILA FROM NEW MEXICO (LEPIDOPTERA).

BY HENRY SKINNER, M.D., SC.D.

Pamphila margarita, n. sp. The male expands 14.5 mm. and the female 15.5 mm., the measurements being taken from the base to the apex of one wing. The colour of the species is tawny olive (Ridgway) and the same colour as *pittacus* Edwards. There is a very faint stigma in the male and on the primaries three vitreous subapical spots; a rectangular spot, constricted in the middle, at the end of the discoidal cell; three spots in an oblique line across the median interspaces, the middle one being the largest and triangular in shape, and the lower one is somewhat linear, with the inner end pointed. The secondaries have a crooked transverse row of four vitreous spots below the middle of the wing; the lower two are small and parallel to the margin, while the upper two are the larger and at right angles to the margin. Fringe dirty white. Underside: Primaries with the spots repeated and also on the secondaries, but larger, and there are in addition a few spots at the base of the wing. The female is like the male, but larger, and the spots are more conspicuous.

This species is allied to *pittacus* Edw. and looks much like it. The transverse row of spots on the upper side of the secondaries of *pittacus* consists of four, straight, distinct rectangular spots, and the two species may be separated by the difference in this row of spots.

Described from a number of specimens of both sexes submitted by Mr. R. C. Williams, the species being named in honour of his wife. They were captured at Jemez Springs, New Mexico, May 26th to June 9th, by Mr. John Woodgate. The type is in the collection of the Academy of Natural Sciences of Philadelphia.

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